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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the matter of:

Indian Bend Wash
Superfund Site (South Area)

SSID #9-G6

RESPONDENT:

Rudy Vafadari, an Individual and
as Trustee of VAFCO Trust

Parcel Nos. 132-59-001M
132-59-031B

1310 East 8th Street
Tempe, Arizona 85281

Proceeding Under Section 106(a) of the
Comprehensive Environmental Response,
Compensation, and Liability Act of 1980
(42 U.S.C. §9606(a)).

U.S. EPA Docket
No. 91-8

ADMINISTRATIVE ORDER FOR
PARTIAL REMEDIAL INVESTIGATION

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1 I. AUTHORITY

2 This Administrative Order ("Order") is issued pursuant to
3 the authority vested in the President of the United States by
4 Section 106(a) of the Comprehensive Environmental Response, Com-
5 pensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C.
6 §106(a). The President delegated this authority to the Ad-
7 ministrator of the United States Environmental Protection Agency
8 ("EPA" or "Agency") by Executive Order 12580, 52 Fed. Reg. 2923,
9 and further delegated it to the Assistant Administrator for Solid
10 Waste and Emergency Response and the Regional Administrators by
11 EPA Delegation Nos. 14-8-A and 14-14-C. This authority has been
12 redelegated to the Director, Hazardous Waste Management Division,
13 EPA, Region 9 ("Director").

14 II. DEFINITIONS

15 A. "IBW Site" means the Indian Bend Wash Superfund Site
16 (South Area) in Tempe, Arizona. The South area of the "IBW Site"
17 is roughly bounded by Price Road on the east, Apache Boulevard on
18 the south, Rural (Scottsdale) Road on the west, and the north
19 bank of the Salt River on the north.

20 B. "DCE Site" means the property parcels 132-59-001M and
21 132-59-031B as listed in the Maricopa County Assessor's Office.
22 Rudy Vafadari currently owns both parcels of property. Diver-
23 sified Consulting Enterprises, Inc., a.k.a. DCE Circuits,
24 ("DCE"), operated at these two parcels in Tempe, Arizona from
25 1968 to 1987. The subsurface portion of the DCE Site includes
26 areas below the surface of the property and adjacent areas to
27 which hazardous substances have migrated.

1 IV. FINDINGS OF FACT

2 A. DCE was owned and operated by Larry Chebowski from Oc-
3 tober 1968 to October 1987. DCE was a small electric manufac-
4 turer of printed circuit boards and related hardware from small
5 personal computer boards to large electronic cabinets. EPA has
6 information indicating that trichloroethene was used at the
7 facility from 1968 to 1972 and that the following chemicals were
8 used and stored at the facility between 1968 through 1987: ferric
9 chloride, muriatic acid, butyl selusol, paint thinner, "hydro
10 squeegy oil", ferric nitrate, silkscreen ink, KPR3, dowper,
11 hydrochloric acid and mineral spirits. The liquid wastes genera-
12 ted by DCE were disposed of in concrete trenches which led out-
13 side into a leach field/french drain system. The wastes then
14 percolated through the unlined leach fields. The wastes received
15 no treatment prior to disposal. The leach field was known to
16 have liquid waste pooling in the area. When such an event oc-
17 curred, muriatic acid would be added directly to the pooled liq-
18 uid waste to enhance the infiltration of the waste into the leach
19 field.

20 B. From October 1968 to April 1978, L. Rae Huish, the owner
21 of property parcels 132-59-001M and 132-59-031B, leased the pro-
22 perty, including the industrial building, to DCE. L. Rae Huish
23 then filed for bankruptcy and Rudy Vafadari, Homa Vafadari, Soh-
24 rab Najmi and Parvin Najmi purchased both parcels of property in
25 May 1978. In September 1983, Rudy Vafadari transferred his in-
26 terest in the property to himself as the Trustee of VAFCO Trust.
27 The property continued to be leased to DCE until October 1987.

1 C. The Indian Bend Wash Superfund Site was placed on the
2 National Priorities List on September 1, 1983. The Indian Bend
3 Wash Superfund Site (South Area) is within the boundaries of the
4 Indian Bend Wash Superfund Site. Indian Bend Wash was listed on
5 the National Priorities List on the basis of volatile organic
6 compounds ("VOCs") detected in samples from water supply wells.
7 The VOCs, trichloroethene, tetrachloroethene, 1,1,1-
8 trichloroethane, have been used typically as solvents by in-
9 dustrial facilities located within the Indian Bend Wash Superfund
10 Site boundaries.

11 D. The Arizona Department Of Health Services, now the
12 Arizona Department of Environmental Quality (ADEQ) conducted
13 facility inspections at DCE on July 17, 1984, April 17, 1986 and
14 October 2, 1986. ADEQ determined that DCE had violated several
15 state hazardous waste laws and concluded that DCE was creating an
16 environmental nuisance. ADEQ met with DCE on June 26, 1986, to
17 discuss response actions. ADEQ and DCE had several subsequent
18 meetings regarding selection of the appropriate response actions.

19 E. On August 11, 1987, ADEQ ordered DCE to comply with
20 various Arizona hazardous waste laws which included submitting a
21 closure plan for ADEQ's approval and implementing the approved
22 closure plan.

23 F. In 1986, DCE filed a Chapter 11 proceeding. The assets
24 of DCE were transferred in 1987 to Harold Wedell, a secured
25 creditor of DCE. All records were left on the DCE Site when
26 Larry Chebowski left the Site in October, 1987. In December,
27 1987, Harold Wedell sold the assets of DCE to Ed Kopp who

1 operated AI Circuits at the former DCE location. Sometime in
2 1988, Kopp transferred the assets of DCE back to Harold Wedell,
3 who in turn sold them to other parties. No business has operated
4 at the DCE Site since AI Circuits stopped operations.

5 G. On May 13, 1988 ADEQ filed for injunctive relief to com-
6 pel DCE, Larry Chebowski, and Rudy Vafadari to undertake a com-
7 plete and thorough environmental investigation of the DCE Site.
8 A closure plan was submitted by Rudy Vafadari was approved by
9 ADEQ in March 1989. On September 5, 1989, the court ordered Rudy
10 Vafadari to undertake remedial actions necessary to protect the
11 public health, welfare and the environment.

12 H. EPA has evaluated the closure activities implemented by
13 Rudy Vafadari to date, and EPA has determined that the activities
14 are inadequate. The closure plan was not strictly adhered to
15 during the field investigation, the conclusions made were sub-
16 stantiated with suspect data, and documentation of the quality
17 assurance/quality control measures was inadequate and in most
18 cases, nonexistent. EPA has determined that additional response
19 is required to meet EPA requirements

20 V. CONCLUSIONS OF LAW

21 A. The DCE Site is a "facility" as defined in Section
22 101(9) of CERCLA, 42 U.S.C. §9601(9).

23 B. Respondent is a "person" as defined in Section 101(21)
24 of CERCLA, 42 U.S.C. §9601(21).

25 C. Samples collected during past ADEQ and EPA inspections
26 indicate the presence of trichloroethene and lead at the DCE
27 Site. These substances, among others, are "hazardous substances"

1 as defined in Section 101(14) of CERCLA, 42 U.S.C. §9601(14).

2 D. The past, present, and potential migration of hazardous
3 substances from the facility constitutes an actual or threatened
4 "release" as defined in Section 101(22) of CERCLA, 42 U.S.C.
5 §9601(22).

6 E. Respondent currently owns, and has owned since ap-
7 proximately May 1978, the DCE Site upon which the hazardous sub-
8 stances are located.

9 F. Respondent is a potentially responsible party as defined
10 in Section 107(a) of CERCLA, 42 U.S.C. §9607(a).

11 VI. DETERMINATIONS

12 A. The Director has determined that an actual or threatened
13 release of hazardous substances from the DCE Site may present an
14 imminent and substantial endangerment to the public health or
15 welfare or the environment.

16 B. The actions required by this Order are necessary to
17 protect the public health, welfare and the environment.

18 C. If performed satisfactorily, the actions required by
19 this Order are consistent with the National Contingency Plan, 40
20 CFR Part 300 ("NCP").

21 VII. NOTICE TO THE STATE

22 Pursuant to Section 106(a) of CERCLA, 42 U.S.C. §9606(a),
23 EPA has notified the State of Arizona of the issuance of this Or-
24 der by providing the Arizona Department of Environmental Quality
25 a copy of this Order.

26 VIII. WORK TO BE PERFORMED

27 A. General Provisions

1 1. All work shall be conducted in accordance with:
2 CERCLA; the NCP; EPA "Guidance for Conducting Remedial Investiga-
3 tions and Feasibility Studies Under CERCLA" (EPA, October 1988)
4 (collectively referred to herein as "RI/FS Guidance"); the stan-
5 dards, specifications, and schedules contained in the Work Plan;
6 the guidance referenced in Section IX of this Order (Sampling,
7 Access, and Data/Document Availability); and any other applicable
8 EPA guidance documents.

9 2. All work performed by or on behalf of Respondent
10 pursuant to this Order shall be performed under the direction and
11 supervision of an Arizona registered civil engineer or Arizona
12 registered geologist with expertise in hazardous waste site in-
13 vestigation. Within thirty (30) days prior to initiation of work
14 at the facility, Respondent shall notify EPA in writing of the
15 name, title and qualifications of such engineer or geologist and
16 of any contractors and/or subcontractors to be used in carrying
17 out the terms of this Order. The qualifications of the persons
18 undertaking the work for Respondent shall be subject to EPA's
19 review for verification. If EPA disapproves in writing of any
20 person's technical and/or experience qualifications, Respondent
21 shall notify EPA within thirty (30) days of Respondent's receipt
22 of EPA's written notice, of the identity and qualifications of
23 the replacement(s). A subsequent EPA disapproval of the
24 replacement(s) shall be deemed a failure to comply with Order.

25 3. Subsequent to selection of the registered engineer,
26 registered geologist, contractors, or subcontractors as described
27 in Paragraph VIII.A.2., above, Respondent may propose that dif-

1 ferent individuals, contractors and/or subcontractors direct and
2 supervise the work required by this Order. If Respondent wishes
3 to propose such a change, Respondent shall notify EPA in writing
4 of the name, title, and qualifications of the proposed in-
5 dividuals and the names of principal contractors and/or sub-
6 contractors proposed to be used in carrying out the work required
7 by this Order. Any such individual, contractors and/or sub-
8 contractors shall be subject to approval by EPA. EPA shall give
9 Respondent its approval or disapproval within thirty (30) days of
10 receiving from Respondent the information required by this
11 paragraph. The naming of any replacement(s) by Respondent shall
12 not relieve Respondent of any of his obligations to perform the
13 work required by this Order. A subsequent EPA disapproval of the
14 replacement(s) shall be deemed a failure to comply with Order.

15 4. All work plans, schedules, and other reports that
16 require EPA's approval and are submitted by Respondent pursuant
17 to this Order are incorporated in this Order upon approval by
18 EPA. All work plans, schedules, and other reports written by EPA
19 pursuant to this Order are incorporated in this Order when such
20 work plans, schedules, and other reports are finalized by EPA.

21 5. All required sampling and sample analyses shall be
22 conducted in compliance with Section IX of this Order at a
23 laboratory using EPA-approved methods and procedures.

24 B. Work and Deliverables

25 Based on the Findings of Fact, Conclusions of Law, and
26 Determinations, EPA hereby orders Respondent to perform the fol-
27 lowing work under the direction of the EPA's Remedial Project

1 Manager, and to comply with all the requirements of this Order.

2 1. Respondent shall initiate the activities set forth
3 in the Statement of Work ("SOW") (Attachment A to this Order).
4 The SOW lists and describes the activities necessary to determine
5 the nature and extent of contamination at the DCE Site.

6 2. Respondent shall provide monthly progress reports
7 to EPA with respect to actions and activities undertaken pursuant
8 to this Order. At a minimum, these progress reports shall in-
9 clude: (1) a description of progress made during the reporting
10 period; (2) a summary of items submitted to EPA under the Order
11 during the reporting period; (3) a list of samples submitted for
12 chemical analysis, including those for which analyses have been
13 returned, and those for which analyses have not been returned,
14 during the reporting period; (4) results of all sample analyses
15 and/or tests or other technical data generated by Respondent or
16 on Respondent's behalf during the reporting period; (5) a
17 description of work planned, including schedules, for the next
18 two months after the reporting period; (6) a description of all
19 problems encountered and solutions developed and implemented for
20 those problems during the reporting period; and (7) a description
21 of all problems anticipated in the next two months following the
22 reporting period.

23 3. Deliverables to be submitted by Respondent are
24 listed below. This listing includes the schedule that Respondent
25 shall follow.

26 Deliverable
27 Remedial Investigation
Work Plan

Schedule
Draft Work Plan due
28 days after effective date

1		of this Order
2		Final Work Plan due
3		14 days after Respondent has
4		received EPA comments on
5	Field Sample Plan	draft Work Plan
6		Draft Field Sample Plan due
7		28 days after Work Plan is
8		approved by EPA
9		Final Field Sample Plan due
10	Quality Assurance/ Quality Control Plan	14 days after Respondent has
11		received EPA comments on
12		draft Field Sampling Plan
13		Draft Quality Assurance/ Quality Control Plan is due
14		28 days after Work Plan is
15		approved by EPA
16		Final Quality Assurance/ Quality Control Plan is due
17	Health & Safety Plan	14 days after Respondent has
18		received EPA comments on the
19		draft Quality Assurance/ Quality Control Plan
20		28 days after Work Plan is
21	Remedial Investigation Report	approved by EPA
22		Draft Remedial Investigation
23		Report due 90 days after field
24		work is completed
25		Final Remedial Investigation
26		Report due 30 days after
27		Respondent receives EPA
		comments
	Monthly Progress Reports	Due the 20th of every month

4. With the exception of the Health & Safety Plan, EPA shall review, comment, and approve or disapprove each plan, report, or other deliverable submitted by Respondent. All EPA

1 comments on draft deliverables shall be incorporated by Respon-
2 dent. EPA intends to review all plans (with the exception of the
3 Health & Safety Plan), reports, or other deliverables within
4 thirty (30) days of receipt of each document. EPA shall notify
5 Respondent in writing of EPA's approval, disapproval of a final
6 deliverable or if EPA requires additional review time. In the
7 event of any disapproval, EPA shall specify the reasons for such
8 disapproval, EPA's required modifications, and a time frame for
9 submission of the revised report, document, or deliverable. If
10 the modified report, document or deliverable is again disapproved
11 by EPA, EPA shall first notify Respondent and then may draft its
12 own report, document or deliverable and incorporate it as part of
13 this Order, and/or seek penalties from Respondent for failing to
14 comply with this Order, and/or conduct the remaining work re-
15 quired by this Order.

16 5. All documents, including monthly progress reports,
17 technical reports, and other correspondence to be submitted by
18 Respondent pursuant to this Order, shall be sent by U.S. mail to
19 the following addressees or to such other addressees as EPA
20 hereafter may designate in writing, and shall be deemed submitted
21 on the date received by EPA. Respondent shall submit two (2)
22 copies of each document to EPA.

23 Documents to be submitted to EPA shall be sent to:

24 Nancy Woo
25 Remedial Project Manager (H-7-2)
26 Hazardous Waste Management Division
27 U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105
Phone: (415)744-2369

1 One copy shall be sent to:

2 Mr. Al Brown
3 Arizona Department of Environmental Quality
4 Hazardous Waste Compliance Section
5 2005 Central Avenue
6 Phoenix, Arizona 85004

7 6. Field work shall begin no later than sixty (60) days
8 after EPA has approved the Field Sample Plan and Quality
9 Assurance/Quality Control Project Plan.

10 IX. SAMPLING, ACCESS, AND DATA/DOCUMENT AVAILABILITY

11 A. While conducting the sample collection and analysis ac-
12 tivities required by the Order, Respondent shall use the quality
13 assurance, quality control, and chain of custody procedures
14 described in the "EPA NEIC Policies and Procedures Manual," May
15 1978, revised May 1986, EPA-330/9-78-001-R, and "U.S. EPA Region
16 9 Guidance for Preparing Quality Assurance Project Plans for Su-
17 perfund Remedial Projects," 9QA-03-00, U.S. EPA Region 9 QAMS,
18 September 1989, and upon receipt by Respondent from EPA, any
19 final amended or superseding versions of such documents. To
20 provide quality assurance and maintain quality control, Respon-
21 dent shall:

22 1. Use a laboratory which has a documented Quality As-
23 surance Program that complies with EPA guidance document QA-03-
24 00;

25 2. Ensure that EPA personnel and/or EPA authorized
26 representatives are allowed access to the laboratory and person-
27 nel used by Respondent for analysis;

 3. Ensure that the laboratory used by Respondent for
analysis performs such analyses according to a method or methods

1 approved by EPA in the Field Sample Plan and Quality
2 Assurance/Quality Control Plan to be submitted by Respondent.

3 B. At the request of EPA, Respondent shall provide to EPA
4 and/or its authorized representatives split or duplicate samples
5 of any samples collected by Respondent as part of the Work Plan.
6 Respondent shall notify EPA in the preceding monthly report of
7 any planned sample collection activity or, if circumstances
8 preclude notice in the preceding monthly report, no later than
9 seven (7) days prior to the planned sampling event.

10 C. Nothing in this Order shall be interpreted as limiting
11 EPA's inspection or information gathering authority under federal
12 law.

13 D. For purposes of this Order, EPA's authorized representa-
14 tives shall include, but not be limited to, the Arizona Depart-
15 ment of Environmental Quality and consultants and contractors
16 hired by EPA to oversee activities required by this Order.

17 X. OTHER APPLICABLE LAWS

18 A. Respondent shall undertake all actions required by this
19 Order in accordance with the requirements of all applicable lo-
20 cal, state, and federal laws and regulations unless an exemption
21 from such requirements is specifically provided under CERCLA or
22 unless Respondent obtains a variance or exemption from the ap-
23 propriate governmental authority.

24 B. Any materials removed from the facility shall be dis-
25 posed of or treated at a facility in accordance with Section
26 121(d)(3) of CERCLA, 42 U.S.C. §9621(d)(3).

27 XI. RECORD PRESERVATION

1 Respondent shall maintain, during the pendency of this Order
2 and for a minimum of ten (10) years after EPA provides notice to
3 Respondent that the work has been completed, a central depository
4 of the records and documents required to be prepared under the
5 Work Plan. In addition, Respondent shall cause to be retained
6 copies of the most recent version of all documents that relate to
7 hazardous substances at the DCE Site and that are in his posses-
8 sion or in the possession of his employees, agents, contractors,
9 or attorneys. After this ten (10) year period, Respondent shall
10 notify EPA at least thirty (30) days before the documents are
11 scheduled to be destroyed. If EPA so requests, Respondent shall
12 provide these documents to EPA.

13 XII. DESIGNATED PROJECT MANAGERS

14 A. EPA designates Nancy Woo, an employee of Region 9 of
15 EPA, as its Remedial Project Manager ("RPM") who shall have the
16 authorities, duties, and responsibilities vested in the Remedial
17 Project Manager by the NCP. Within fifteen (15) days of the ef-
18 fective date of this Order, Respondent shall designate a Project
19 Coordinator who shall be responsible for overseeing Respondent's
20 implementation of this Order. The EPA Remedial Project Manager
21 will be EPA's designated representative at the facility. To the
22 maximum extent possible, all oral communications between Respon-
23 dent and EPA concerning the activities performed pursuant to this
24 Order shall be directed through EPA's Remedial Project Manager
25 and Respondent's Project Coordinator. All documents, including
26 progress and technical reports, approvals, and other correspon-
27 dence concerning the activities performed pursuant to the terms

1 and conditions of this Order, shall be delivered in accordance
2 with Paragraph VIII.B.5.

3 B. EPA and Respondent may change their respective Remedial
4 Project Manager and Project Coordinator. Such a change shall be
5 accomplished by notifying the other party in writing at least one
6 week prior to the change except in the case of an emergency, in
7 which case notification shall be made orally followed by written
8 notification as soon as possible.

9 C. Consistent with the provisions of this Order, the EPA
10 Remedial Project Manager shall also have the authority vested in
11 the On-Scene Coordinator ("OSC") by the NCP, unless EPA designates a separate individual as OSC, who shall then have such
12 authority. This includes, but is not limited to, the authority
13 to halt, modify, conduct, or direct any tasks required by this
14 Order and/or undertake any response actions (or portions of the
15 response action) when conditions present or may present a threat
16 to public health or welfare or the environment as set forth in
17 the NCP.
18

19 D. The absence of the EPA RPM or OSC from the Site shall
20 not be cause for the stoppage of work. Nothing in this Order
21 shall limit the authority of the OSC or the EPA Remedial Project
22 Manager under federal law.

23 XIII. MODIFICATION OF WORK REQUIRED

24 A. In the event of unanticipated or changed circumstances
25 at the facility, Respondent shall notify the EPA RPM, or, if the
26 EPA's RPM is unavailable, the EPA OSC by telephone within twenty-
27 four (24) hours of discovery of the new or changed circumstances.

1 This verbal notification shall be followed by written notifica-
2 tion postmarked within five (5) days of discovery of the new or
3 changed circumstances.

4 B. The Director may determine that in addition to tasks ad-
5 dressed herein, additional work may be required. Where consis-
6 tent with Section 106(a) of CERCLA, the Director may direct as an
7 amendment to this Order that Respondent perform these response
8 actions in addition to those required herein by any plan.

9 Respondent shall implement the additional tasks which the Direc-
10 tor identifies. The additional work shall be completed according
11 to the standards, specifications, and schedules set forth by the
12 Director.

13 XIV. SITE ACCESS

14 A. Respondent shall permit EPA and its authorized represen-
15 tatives to have access at all times to the DCE Site to monitor
16 any activity conducted pursuant to the Work Plan to conduct such
17 tests or investigations as EPA deems necessary. Nothing in this
18 Order shall be deemed a limit upon EPA's authority under federal
19 law to gain access to the DCE Site.

20 B. To the extent that Respondent requires access to land
21 other than land he owns in carrying out the terms of this Order,
22 Respondent shall, within forty-five (45) days of the effective
23 date of this Order, obtain access for EPA, its contractors and
24 oversight officials; state oversight officials and state contrac-
25 tors; and Respondent or his authorized representatives. If
26 Respondent fails to gain access within forty-five (45) days, he
27 shall continue to use best efforts to obtain access until access

1 is granted. For purposes of this paragraph, "best efforts" in-
2 cludes but is not limited to, seeking judicial assistance and the
3 payment of money as consideration for access. If access is not
4 provided within the time referenced above, the EPA may obtain ac-
5 cess under Sections 104(e) or 106(a) of CERCLA.

6 XV. DELAY IN PERFORMANCE

7 A. Any delay in performance of this Order that, in the
8 EPA's judgment, is not properly justified by Respondent under the
9 terms of this Section shall be considered a violation of this Or-
10 der. Any delay in performance of this Order shall not affect
11 Respondent's obligations to fully perform all obligations under
12 the terms and conditions of this Order.

13 B. Respondent shall notify EPA of any delay or anticipated
14 delay in performing any requirement of this Order. Such
15 notification shall be made by telephone to EPA's RPM within
16 forty-eight (48) hours after Respondent first knew or should have
17 known that a delay might occur. Respondent shall adopt all
18 reasonable measures to avoid or minimize any such delay. Within
19 five (5) business days after notifying EPA by telephone, Respon-
20 dent shall provide written notification fully describing the na-
21 ture of the delay, any justification for delay, any reason why
22 Respondent should not be held strictly accountable for failing to
23 comply with any relevant requirements of this Order, the measures
24 planned and taken to minimize the delay, and a schedule for im-
25 plementing the measures that will be taken to mitigate the effect
26 of the delay. Increased costs or expenses associated with im-
27 plementation of the activities called for in this Order are not

1 justifications for any delay in performance.

2 C. If Respondent is unable to perform any activity or sub-
3 mit any document within the time required under this Order,
4 Respondent may, prior to the expiration of the time, request an
5 extension of time in writing. The extension request shall in-
6 clude a justification for the delay. Submission of an extension
7 request shall not affect Respondent's obligation to comply with
8 the requirements of this Order.

9 D. If EPA determines that good cause exists for an exten-
10 sion of time, it may grant a request made pursuant to Sub-
11 paragraph C, above, and specify in writing a new schedule for
12 completion of the activity and/or submission of the document.

13 XVI. ENDANGERMENT AND EMERGENCY RESPONSE

14 A. In the event of any action or occurrence during the
15 performance of the Work which causes or threatens to cause a
16 release of a hazardous substance or which may present an im-
17 mediate threat to public health or welfare or the environment,
18 Respondent shall immediately take all appropriate action to
19 prevent, abate, or minimize the threat, and shall immediately
20 notify EPA's RPM, or, if the RPM is unavailable, EPA's OSC. If
21 neither of these persons is available, Respondent shall notify
22 the EPA Emergency Response Unit, Region 9, Phone Number (415)-
23 744-2000. Respondent shall take such action in consultation with
24 EPA's RPM and in accordance with all applicable provisions of
25 this Order, including but not limited to the Health and Safety
26 Plan and the Contingency Plan.

27 B. Nothing in the preceding paragraph shall be deemed to

1 limit any authority of the United States to take, direct, or or-
2 der all appropriate action to protect human health and the en-
3 vironment or to prevent, abate, or minimize an actual or
4 threatened release of hazardous substances on, at, or from the
5 DCE Site.

6 XVII. ASSURANCE OF ABILITY TO COMPLETE WORK

7 A. Respondent shall demonstrate its ability to complete the
8 work required by this Order and to pay all claims that arise from
9 the performance of the work by obtaining and presenting to EPA
10 within ten (10) days after approval of the Work Plan, one of the
11 following: (1) a performance bond; (2) a letter of credit; (3) a
12 guarantee by a third party; or (4) internal financial information
13 to allow EPA to determine that Respondent has sufficient assets
14 available to perform the work. Respondent shall demonstrate
15 financial assurance in an amount no less than the estimate of
16 cost for the remedial investigation in the approved Work Plan.
17 If Respondent seeks to demonstrate ability to complete the
18 remedial investigation by means of internal financial informa-
19 tion, or by guarantee of a third party, it shall re-submit such
20 information monthly from the effective date of this Order. If
21 EPA determines that such financial information is inadequate,
22 Respondent shall, within fifteen (15) days after receipt of EPA's
23 notice of determination, obtain and present to EPA for approval
24 on the other forms of financial assurance listed above.

25 B. At least seven (7) days prior to commencing any work at
26 the DCE Site pursuant to this Order, Respondent shall submit to
27 EPA a certification that Respondent or his contractors and sub-

1 contractors have adequate insurance coverage or has indemnifica-
2 tion for liabilities for injuries or damages to persons or
3 property which may result from the activities to be conducted by
4 or on behalf of Respondent pursuant to this Order. Respondent
5 shall ensure that such insurance or indemnification is maintained
6 for the duration of performance of the work required by this Or-
7 der.

8 XVIII. DISCLAIMER

9 The United States, by issuance of this Order, assumes no
10 liability for any injuries or damages to persons or property
11 resulting from acts or omissions by Respondent, or his employees,
12 agents, heirs, successors, assigns, contractors, or consultants
13 in carrying out any action or activity pursuant to this Order.
14 Neither EPA nor the United States shall be held as a party to any
15 contract entered into by Respondent, or his employees, agents,
16 heirs, successors, assigns, contractors, or consultants in carry-
17 ing out any action or activity pursuant to this Order.

18 XIX. ENFORCEMENT AND RESERVATIONS

19 A. EPA reserves the right to bring an action against
20 Respondent under Section 107 of CERCLA, 42 U.S.C. §9607, for
21 recovery of any response costs incurred by the United States re-
22 lated to this Order and not reimbursed by Respondent. This
23 reservation shall include but not be limited to past costs,
24 direct costs, indirect costs, the costs of oversight, the costs
25 of compiling the cost documentation to support oversight cost
26 demand, as well as accrued interest as provided in Section 107(a)
27 of CERCLA, 42 U.S.C. §9607.

1 B. Notwithstanding any other provision of this Order, at
2 any time during the response action, EPA may perform its own
3 studies, complete the response action (or any portion of this
4 response action) and seek reimbursement from Respondent for its
5 costs, or seek any other appropriate relief.

6 C. Nothing in this Order shall preclude EPA from taking any
7 additional enforcement action, including modification of this Or-
8 der or issuance of additional Orders, and/or additional remedial
9 or removal actions as EPA may deem necessary, or from requiring
10 Respondent in the future to perform additional activities pur-
11 suant to CERCLA, 42 U.S.C. §9607(a), et seq., or any other ap-
12 plicable law. Respondent shall be liable under CERCLA Section
13 107(a), 42 U.S.C. §9607(a), for the costs of any such additional
14 actions.

15 D. Notwithstanding any provision of this Order, the United
16 States hereby retains all of its information gathering, inspec-
17 tion and enforcement authorities and rights under CERCLA, RCRA
18 and any other applicable statutes or regulations.

19 E. Respondent shall be subject to civil penalties under
20 Section 106(b) of CERCLA, 42 U.S.C. §9606(b), of not more than
21 \$25,000 for each day in which Respondent violates or fails to
22 comply with the requirements of this Order. In addition, failure
23 to take response action in compliance with this Order, or any
24 portion hereof, without sufficient cause, may result in liability
25 under Section 107(c)(3) of CERCLA, 42 U.S.C. §9607(c)(3), for
26 punitive damages in an amount at least equal to, and not more
27 than three (3) times the amount of any costs incurred by the Haz-

1 ardous Substance Superfund, as a result of such failure to
2 comply.

3 F. Notwithstanding compliance with the terms of this Order,
4 including the completion of an EPA-approved remedial investiga-
5 tion, Respondent is not released from liability, if any, for any
6 enforcement actions beyond the terms of this Order taken by EPA
7 respecting the Site.

8 G. EPA reserves the right to take any enforcement action
9 pursuant to CERCLA and/or any other legal authority, including
10 the right to seek injunctive relief, monetary penalties, reim-
11 bursement of response costs, and punitive damages for any viola-
12 tion of law or this Order.

13 H. EPA expressly reserves all rights and defenses that it
14 may have, including the EPA's right both to disapprove of work
15 performed by Respondent and to request that Respondent perform
16 tasks in addition to those detailed in the Work Plan, as provided
17 in Section VIII (Work to be Performed) of this Order. EPA
18 reserves the right to undertake removal actions and/or remedial
19 actions at any time. EPA reserves the right to seek reimburse-
20 ment from Respondent for the costs incurred by the United States
21 in removal and remedial actions.

22 I. This Order does not release Respondent from any claim,
23 cause of action or demand in law or equity, including, but not
24 limited to, any claim, cause of action, or demand which lawfully
25 may be asserted by representatives of the United States or the
26 State of Arizona.

27 J. No informal advice, guidance, suggestions, or comments

1 by EPA regarding reports, plans, specifications, schedules, and
2 any other writing submitted by Respondent will be construed as
3 relieving Respondent of his obligation to obtain such formal ap-
4 proval as may be required by this Order.

5 XX. NOTICE OF INTENT TO COMPLY

6 Respondent shall, within seven (7) days of receipt of this
7 Order, provide written notice to EPA stating whether he will
8 comply with the terms of this Order. Failure to respond, or
9 failure to agree to comply with this Order, shall be deemed a
10 refusal to comply with this Order.

11 XXI. OPPORTUNITY TO CONFER

12 A. Respondent may, within seven (7) days of receipt of this
13 Order, request a conference with EPA's Director of the Hazardous
14 Waste Management Division, or whomever the Director may designate
15 except for the Remedial Project Manager, to discuss this Order.
16 If requested, the conference shall occur within fourteen (14)
17 days of the request at EPA's Regional Office, 75 Hawthorne
18 Street, San Francisco, California.

19 B. The purpose and scope of the conference shall be limited
20 to issues involving the implementation of the response actions
21 required by this Order and the extent to which Respondent intends
22 to comply with this Order. This conference is not an evidentiary
23 hearing, and does not constitute a proceeding to challenge this
24 Order. It does not give Respondent a right to seek review of
25 this Order, or to seek resolution of potential liability, and no
26 official stenographic record of the conference will be made. At
27 any conference held pursuant to Respondent's request, Respondent

1 may appear in person or by an attorney or other representative.
2 Requests for a conference must be made by telephone to Nancy Woo,
3 Remedial Project Manager, (415) 744-2369, 75 Hawthorne Street
4 H-7-2, San Francisco, California 94105.

5 XXII. SEVERABILITY

6 If any provision or authority of this Order or the applica-
7 tion of this Order to any circumstance is held by a court to be
8 invalid, the application of such provision to other circumstances
9 and the remainder of this Order shall not be affected thereby,
10 and the remainder of this Order shall remain in force.

11 XXIII. STATE AND LOCAL AGENCY PARTICIPATION

12 Respondent shall make available, upon request of EPA's
13 Remedial Project Manager, copies of any deliverable required by
14 this Order to the State of Arizona for review. EPA will provide
15 Respondent with a current mailing list of state agencies prior to
16 the effective date of this Order. After the agencies have had
17 the opportunity to review the deliverables, EPA may meet with the
18 agencies to discuss the deliverables and prepare collaborative
19 comments. Any collaborative comments and/or comments prepared by
20 or on behalf of EPA shall be submitted to Respondent as EPA's
21 comments. Respondent shall respond to all of these comments as
22 may be required by the terms of Section VIII (Work to be
23 Performed).

24 XXIV. EFFECTIVE DATE

25 This Order is effective on April 15, 1991, provided Respon-
26 dent has received this Order prior to that date.

27 XXV. TERMINATION AND SATISFACTION

1 The provisions of this Order shall be deemed satisfied upon
2 Respondent's receipt of written notice from EPA that Respondent
3 has demonstrated, to the satisfaction of EPA, that all of the
4 terms of this Order, including any additional tasks which EPA has
5 determined to be necessary, have been completed.

6

7 IT IS SO ORDERED:

8 UNITED STATES
9 ENVIRONMENTAL PROTECTION AGENCY

10

11 By: Jeff Zelikson
12 Director
13 Hazardous Waste Management Division
14 Region 9

Date: 3-28-91

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1 EPA Region 9 Contacts:

2 Nancy Woo
3 Remedial Project Manager (H-7-2)
4 Hazardous Waste Management Division
5 U.S. EPA, Region 9
6 75 Hawthorne Street
7 San Francisco, CA 94105
8 (415) 744-2369

9 Don Zurosky
10 On-Scene Coordinator (H-8-3)
11 Hazardous Waste Management Division
12 U.S. EPA, Region 9
13 75 Hawthorne Street
14 San Francisco, CA 94105
15 (415) 744-2285

16 William Keener
17 Assistant Regional Counsel
18 Office of Regional Counsel (RC-5)
19 U.S. EPA, Region 9
20 75 Hawthorne Street
21 San Francisco, CA 94105
22 (415) 744-1353

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Attachment A to Administrative Order 91-8
STATEMENT OF WORK FOR DCE CIRCUITS; REMEDIAL INVESTIGATION

INTRODUCTION

This Statement of Work (SOW) calls for the implementation of a remedial investigation (RI) of the DCE Site by Respondent. The purpose of this RI is to define the nature and extent of contamination at the DCE Site.

Respondent will conduct this RI and will produce a draft RI report that is in accordance with this statement of work, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (U.S. EPA, Office of Emergency and Remedial Response, October 1988), and any other guidances that EPA uses in conducting a RI (a list of the primary guidances is attached), as well as any additional requirements of this Order. The RI/FS Guidance describes the report format and the required report content. Respondent will furnish all necessary personnel, materials, and services needed, or incidental to, performing the RI, except as otherwise specified in the Order.

The DCE Remedial Investigation Statement of Work calls for the following:

1. A complete analysis and determination of adequacy of all the investigation and remedial activities that have occurred prior to receiving this Order.
2. Identification of the Data Quality Objectives necessary to determine the nature and extent of contamination remaining on the dce DCE Site including determining the existence of contaminated ground water.
3. Development of a Work Plan, Field Sample Plan, Quality Assurance/Quality Control Plan, and Health and Safety Plan. Each plan with the exception of the Health and Safety Plan will be submitted for EPA approval. No field work will be initiated until EPA has approved the Work Plan, Field Sample Plan and Quality Assurance/Quality Control Plan. Each plan shall be delivered for EPA review under a separate cover.
4. Implementation of the approved plans with EPA oversight.

5. Submittal of draft RI report detailing the results of the remedial investigation. The draft report shall be submitted for EPA's approval.

As specified in CERCLA Section 104(a)(1), 42 USC §9604(a)(1), EPA will oversee of Respondent's activities throughout the work. The schedule for completion of this RI SOW is included in this Order, see Section VIII.B.3.

In order to fulfill the requirements of this Order Respondent shall implement the work to develop the following deliverables:

1. DCE SITE SCOPING DOCUMENT

Respondent will gather and analyze the existing DCE Site background information to assist in planning the scope of the RI.

Before planning RI activities, all existing DCE Site data will be thoroughly compiled and reviewed by Respondent. Specifically, this will include a review of all presently available data relating to the varieties and quantities of hazardous substances at the DCE Site and all data relating to past disposal practices. This effort will include a review of results from any previous sampling events and clean-up activities that have been conducted. This effort will also include a review of any information regarding the construction of the french drain/leach field, particularly its disposal lines, to help characterize the migration of waste liquids.

Respondent shall summarize his finding and submit this report prior to drafting the work plan. EPA will review and comment on Respondent's findings and will determine the appropriate use of past data.

2. REMEDIAL INVESTIGATION WORKPLAN (RI/FS Guidance, Chapter 2)

Once the data has been collected and analyzed to EPA's satisfaction, Respondent will develop a work plan. EPA must review and approve the work plan before any field activity is initiated.

The overall DCE Site objectives for the work plan are as follows:

- A. Identification and delineation of any contaminated media at the DCE Site.

- B. Identification of the sources of contamination located at the DCE Site.
- C. Determination of the fate and transport of the contaminants present at the DCE Site.

The work plan will include a comprehensive description of the work to be performed, including the methodologies to be utilized. In addition, the work plan must include the rationale for performing the required activities.

Specifically, the work plan shall include a description of the following topics:

- * DCE Site Background

- geographic location
- geology and hydrogeology
- demographics
- ecological, cultural and natural resources

- * DCE Site History

- DCE operational history
- past disposal practices and waste quantities generated
- previous investigations and clean-up actions
- summary of existing DCE Site specific data
- distribution and location of the contaminants on remaining on DCE Site (if possible)

- * Identification of potential contaminant migration and exposure pathways and receptors

- * Identification of Data Quality Objectives (DQOs)

- * Detailed list of tasks to be performed to fulfill the requirements of this SOW

If Respondent cannot adequately describe the physical characteristics of the DCE Site and its surrounding areas including the physiography, geology, and hydrology, Respondent will include the investigation of the DCE Site characteristics in the Field Sample Plan. Additional data requirements and analyses may be identified throughout the process. Respondent will submit a technical memorandum documenting the need for additional data,

and identifying the DQOs whenever such requirements are identified. In any event, Respondent is responsible for fulfilling additional data and analysis needs identified by EPA consistent with the general scope and objectives of this RI.

3. FIELD SAMPLE PLAN, QUALITY ASSURANCE/QUALITY CONTROL PLAN, SAMPLE AND ANALYSIS PLAN AND HEALTH & SAFETY PLAN

Respondent will prepare a Field Sample Plan (FSP) and a Quality Assurance/Quality Control Plan (QAPP) to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols, and to ensure that the data meet the DQOs.

Attachment B represents a limited compendium of field sampling techniques, analytical methods, and associated quality assurance/quality control procedures. These field sampling techniques are the more common ones used at the IBW Site (South Area). Where these types of sampling are called for by the Work Plan, Respondent shall use the protocols and analytical methods, and may cite Attachment B in the FSP and QAPP. Respondent shall evaluate and incorporate into the FSP and QAPP any necessary protocols and analytical methods that are not included in the Attachment B. The objectives in the Work Plan will dictate the types of sampling that are necessary.

3a. Field Sample Plan (FSP)

The FSP will define in detail the sampling and data gathering methods that will be used during the remedial investigation. It will include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis.

The objectives of the FSP should include the following:

- A. Define the extent and condition of the cooling tower basin.

A past report indicates that a cooling tower basin exists beneath the surface of the property and prevented the migration of the liquid waste disposed of in the french drain/leach field. However, this hypothesis needs to be further investigated in order to satisfy documentation requirements of EPA.

- B. Define the nature and extent of the subsurface contamination above, and possibly below, the cooling tower basin.

Sample collection and analysis of subsurface soils should be expanded to include a reasonable frequency of samples collected to define the vertical and lateral extent of subsurface soil contamination. Initial plans should contain a sampling scheme to characterize the vertical depth of contamination, including sample collection at the following depths: six inches below the surface, two feet below the surface, and every five feet thereafter until the ground water table is reached. Alternately, selection of sample depths below two feet may be based upon changes in lithology until the ground water table is reached.

Areas to be sampled should include the railroad loading dock, along the railroad tracks, the french drain/leach field area and the soil underlying the building where the electroplating activities occurred. Bulk soil samples should be analyzed for total and TCLP (Toxicity Characteristic Leaching Procedure) metals and base/neutral and acid organic compounds. If a relatively undisturbed bulk soil sample can be collected, then the analyses for Volatile Organic Compounds (VOCs) should be conducted as well.

The subsurface soil investigation will also include a soil gas investigation. A previous EPA soil investigation for the Indian Bend Wash Superfund DCE Site (South Area) indicated that soil gas levels of concern existed at the DCE Site. Shallow soil gas sampling shall be conducted in order to delineate the VOC contamination at a depth of approximately 5 feet below land surface.

After the shallow soil gas sampling effort is completed, a minimum of two soil vapor sampling monitoring wells will be required. The soil vapor monitoring wells will be used to determine the vertical concentration profiles of VOCs and to determine changes in VOC concentrations with time. The soil vapor monitoring wells will be constructed in the vadose zone and will be constructed to permit vapor sampling at chosen intervals. The soil vapor monitoring wells will be sampled quarterly to determine the chemical nature and concentration of VOCs present, and to detect any changes in chemical character or concentration that may indicate vapor migration or chemical transformation. Additional soil vapor monitoring wells may be required to fully assess migration and transformation phenomenon.

Sample methodology, analytical methods and parameters, well construction and installation procedures to be implemented are identified in Attachment B of this Order.

- C. Evaluate the ground water quality beneath the property surface.

A minimum of one shallow (approximately 150 feet deep) ground water monitoring well shall be constructed near the leach field/french drain disposal area at the DCE Site. The well at a minimum, will be sampled at quarterly intervals. Drilling and construction of the well, well characterization and sampling and analytical parameters to be followed are in Attachment B.

In addition the FSP shall include the collection of data to define the physical characteristics of the DCE Site and its surrounding areas including the physiography, geology, hydrogeology, hydrology, and specific physical characteristics data gaps identified in the work plan. This information will be ascertained through a combination of physical measurements, observations, and sampling efforts and will be utilized to define potential transport pathways and receptor populations. In defining the DCE Site's physical characteristics Respondent will also obtain sufficient hydrogeological characteristics for the projection of contaminant fate and transport.

3b. Quality Assurance/Quality Control Plan (QAPP)

The QAPP will describe the project DQOs and organization, functional activities, data reduction, validation, reporting and personnel qualifications. Respondent may cite Attachment B if the necessary techniques, protocols and QA/QC procedures are already described in Attachment B.

Respondent will demonstrate, to EPA's satisfaction, that each laboratory it uses is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the DCE Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in EPA's Contract Laboratory Program (CLP) is selected by Respondent, methods consistent with CLP methods that would be used at this site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, the laboratory's QA/QC program must be submitted for EPA review and approval. EPA approval must be given prior to initiation of work by the non-CLP lab. EPA will require that Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment and material specifications. Respondent will provide assurances that EPA has access to laboratory personnel, equipment and records for sample collection, transportation and analysis.

3c. DCE Site Health and Safety Plan

A Health and Safety Plan will be prepared in conformance with Respondent's health and safety program, and in compliance with Occupational Safety and Health Act (OSHA) regulations and protocols. The Health and Safety Plan will include the 11 elements described in the RI Guidance, such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and site control.

4. REMEDIAL INVESTIGATION REPORT (RI/FS GUIDANCE, CHAPTER 3)

During this phase of the RI, the Work Plan, FSP, QAPP and Health and Safety Plan are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study. Respondent will notify EPA at least two weeks in advance of the field work regarding the planned dates for field activities, including field lay out of the sampling grid, excavation, installation of wells, initiating sampling, installation and calibration of equipment, aquifer tests, and initiation of analysis and other field investigation activities. Respondent will demonstrate that the laboratory and type of laboratory analyses that will be utilized during site characterization meets the specific QA/QC requirements in Attachment B. It may be necessary for Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, Respondent will provide a monthly progress report and participate in meetings at major points in the RI.

The field investigation includes the gathering of data to define DCE Site physical characteristics, sources of contamination, and the nature and extent of contamination at the DCE Site. These activities will be performed by Respondent in accordance with the Work Plan, the FSP and the QAPP.

Respondent will initiate field support activities following EPA approval of the work plan and SAP. Field support activities include scheduling, and procuring equipment, laboratory services, and/or contractors. Respondent will notify EPA at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. Respondent will also notify EPA in writing upon completion of field support activities.

Respondent will analyze and evaluate the data to describe: (1) DCE Site physical characteristics, (2) contaminant source characteristics, (3) nature and extent of contamination, and (4)

contaminant fate and transport. Results of the DCE Site physical characteristics, source characteristics, and extent of contamination analyses are used to analyze contaminant fate and transport. The evaluation will include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants.

Information gathered during DCE Site characterization will be consistently documented and adequately recorded by Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be used to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

Respondent will maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized by EPA. Analytical results developed under the work plan will not be included in any site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, Respondent will establish a data security system to safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

After completing field sampling and analysis, Respondent will prepare a draft Remedial Investigation report for EPA approval. This report will include the following:

- a review of the investigative activities that have taken place
- description and display of data which document the location and contamination at the DCE Site (includes a description of the affected medium, location, types, physical state, concentration of contaminants and quantity)
- discussion of fate and transport mechanisms

Also to be included as appendices to the draft RI report are a summary of all validated data, field logs, well construction logs, chain of custody forms and any other information used to document the findings of the remedial investigation.

Respondent will refer to the RI/FS Guidance for an outline of the report format and contents. Following comment by EPA, Respondent will prepare a final RI report which satisfactorily addresses EPA's comments.

REFERENCES FOR CITATION

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI process:

The (revised) National Contingency Plan

"Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.

"Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies," U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.

"A Compendium of Superfund Field Operations Methods," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.

"EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, EPA-330/9-78-001-R.

"Data Quality Objectives for Remedial Response Activities," U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.

"U.S. EPA Region 9 Guidance for Preparing Quality Assurance Project Plans for Superfund Remedial Projects," 9QA-03-00, U.S. EPA Region 9 QAMS, September 1989

"Users Guide to the EPA Contract Laboratory Program," U.S. EPA, Sample Management Office, August 1982.

"Health and Safety Requirements of Employees Employed in Field Activities," U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.

OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).

"Preparation of a U.S. EPA Region 9 Sampling Plan for Private and State-Lead Superfund Projects," 9QA-06-89, U.S. EPA Region 9, QAMS, April 1990.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the matter of:)
)
Indian Bend Wash)
Superfund Site (South Area))
)
SSID #9-G6)
)
RESPONDENT:)
)
Rudy Vafadari, an Individual and)
as Trustee of VAFCO Trust)
)
Parcel Nos. 132-59-001M)
132-50-031B)
)
1310 East 8th Street)
Tempe, Arizona 85281)
)
Proceeding Under Section 106(a) of the)
Comprehensive Environmental Response,)
Compensation, and Liability Act of 1980)
(42 U.S.C. §9606 (a)).)
_____)

FIRST AMENDMENT
U.S. EPA Docket
No.91-8 A

FIRST AMENDMENT TO THE
ADMINISTRATIVE ORDER FOR
PARTIAL REMEDIAL INVESTIGATION

1 Administrative Order No. 91-8 is hereby amended to read as
2 follows. No changes other than those expressly made herein
3 shall be implied or construed.

4 AMENDMENT ITEM NO. 1 Paragraph VIII., WORK TO BE PERFORMED,
5 subparagraph B.3., is hereby replaced and shall read as follows:

6 3. Deliverables to be submitted by Respondent are listed
7 below. This listing includes the schedule that Respondent shall
8 follow.

9	<u>Deliverables</u>	<u>Schedule</u>
10	Scoping Document	
11		Due 28 days after effective date
12	Remedial Investigation	
13	Work Plan	
14		Draft Work Plan due 28 days after the Scoping Document is approved by EPA
15		Final Work Plan due 14 days after Respondent has received EPA comments on draft Work Plan
16		
17		
18	Field Sample Plan	
19		Draft Field Sample Plan due 28 days after Work Plan is approved by EPA
20		
21		Final Field Sample Plan due 14 days after Respondent has received EPA comments on draft Field Sampling Plan
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23		
24	Quality Assurance/ Quality Control Plan	
25		Draft Quality Assurance/ Quality Control Plan is due 28 days after Work Plan is approved
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Final Quality Assurance/
Quality Control Plan is
due 14 days after
Respondent has received
EPA comments on the
draft Quality Assurance/
Quality Control Plan

Health & Safety Plan

28 days after Work Plan
is approved by EPA

Remedial Investigation Report

Draft Remedial
Investigation Report due
90 days after field work
is completed


Final Remedial
Investigation Report due
30 days after Respondent
receives EPA comments

Monthly Progress Reports

Due the 20th of every
month

ADMINISTRATIVE ORDER NO.91-8 IS SO AMENDED.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

By:  Date: 5/8/91
Jeff Zelikson
Director
Hazardous Waste Management Division
Region 9